GTAGGTTTTG GGTGTCGGTG AGATCAGTGT TCGACCGAAA TCCAACGCAT TTTCTAAT:T GGATTTCAGA AATCTGGGAG AAGGTAGCAG AATGTCGGAT TCATATGATG ATCGAATGAA AGATCATGAT ATGGACGAAC GAGCCCCGAT TGATCCGGCG CCATTCTCGT TAAGTGATCT AAAGAAAGCA ATCCCTGCAC ATTGCTTCCG GCGATCCGCC GTCTGGTCAT CCTGCTACijt AGTTCAGGAT CTCATTATCA CCTTCCTTTT ATACACGGTC GCCAACACCT ACATTCCTC.4 CCTCCCTCCT CCTCTAGTTT ACTTAGCATG GCCGGTTTAC TGGTTTTGCC AATCTTGCAT CCTCACTGGT TTATGGGTCC TCGGCCATGA ATGCGGCCAT CATGCCTTTA GTGAGTAC(:A GTGGATTGAT AACGCCGTTG GATTCGTCCT CCATTCGGCT CTCCTCACCC CTTACTTTTC TTGGAAATAC AGCCATCGAA AGCACCATGC AAACACAAAT TCACTCGAAA ACGAGGAAGT TTACATTCCT AGAACTCAGT CCCAGCTCAG GACTTACTCC ACATACGAAT TTCTTGACAA CACGCCTGGT CGAATCCTCA TCTTGGTCAT CATGTTAACC TTAGGATTTC CTTTATACCT CTTAACGAAT GTTTCAGGCA AGAAGTACGA TAGATTTACC AACCACTTTG ATCCATTGAG CCCGATCTTC ACCGAGCGTG AGCGAATCCA GGTTGCGTTA TCAGATCTTG GTATCGTT(;C AGTGTTTTAC GGACTCAAGT TTCTTGTACA AACAAAAGGA TTTGGTTGGG TGATGTGCAT GTATGGAGTT CCAGTGATAG GTCTGAATTC CTTCATTATC GTAATCACTT ATCTGCACCA CACACATCTG TCGTCACCCC ATTACGATTC AACCGAATGG AACTGGATCAAAGGAGCCTT GACCACAATC GACAGAGATT TCGGTCTCCT GAATCGGGTT TTCCACGACG TTACACACAC CCACGTGTTG CACCATTTGT TTCCCTACAT TCCACATTAT CATGCAAAGG AGGCAAGC()A GGCCATCAAG CCAATCTTGG GTGATTACAG GATGATCGAC AGGACTCCAT TTTTCAAAGC AATGTGGAGA GAGGCCAAGG AATGCATTTA CATCGAGCAA GATGCAGACA GCAAGCACAA AGGGACATAT TGGTACCATA AAATG<u>TAA</u>TC GATGATGGAG TTTAGTTGGA AATAATGACA TGCAGCATCC CTTTTGTATG CTTGAATCGT TCTATTTCTT TATATGTTTT GTAAGATAAA TAAGTAAATC TTTGAGTGAA GATGGGGAGC AGGAAACAAG CAGAATATAA TACGCTAAAA ΑΑΑΑΑΑΑΑΑ ΑΑΑΑΑΑΑΑΑ ΑΑΑΑΑΑ

<u>Figure 1:</u> cDNA sequence of Stokesia laevis epoxygenase (SEQ ID No.1). The start and the stop codons are underlined

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MSDSYDDRMK DHDMDERAPI DPAPFSLSDL KKAIPAHCFR RSAVWSSCYV VQDLIITFLL YTVANTYIPH LPPPLVYLAW PVYWFCQSCI LTGLWVLGHE CGHHAFSEYQ WIDNAVGFVL HSALLTPYFS WKYSHRKHHA NTNSLENEEV YIPRTQSQLR TYSTYEFLDN TPGRILILVI MLTLGFPLYL LTNVSGKKYD RFTNHFDPLS PIFTERERIQ VALSDLGIVA VFYGLKFLVQ TKGFGWVMCM YGVPVIGLNS FIIVITYLHH THLSSPHYDS TEWNWIKGAL TTIDRDFGLL NRVFHDVTHT HVLHHLFPYI PHYHAKEASE AIKPILGDYR MIDRTPFFKA MWREAKECIY IEQDADSKHK GTYWYHKM
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Figure 2: Peptide sequence of Stokesia laevis epoxygenase (SEQ ID No.2).

Stokesia Vernonia Crepis	1 TTATGAAAGC TCGATG	CGGTG TTCGATCAAT	TCAAATCGAC		
Stokesia Vernonia Crepis	51 TCGACCGAAA TCCAAG TCGAACTCAA CAATTG		TAATTGGATC	AAGCGGGCGG.	
Stokesia Vernonia Crepis	101 AAGGTAGCAG AATGTG ATATGAT GATGTG ttgaccataa atcat	CGGAT TCATGTGATG	ATCATGATCA	GCTGGTGAAA	
Stokesia Vernonia Crepis	151 AAAGATCATG ATATGO GATGATCATA ATATA tcggaaaaat cggtca	AACGA ACGTGCACCG	GTTGATGCGG	CACCATTCTC	
Stokesia Vernonia Crepis	201 GTTAAGTGAT CTAAAG GTTAAGCGAT CTAAAG actgagtgaa ttgaag	GAAAG CAATCCCTCC	GCATTGCTTC	CAGCGATCTG	
Stokesia Vernonia Crepis	251 CCGTCTGGTC ATCCTC CCATCCGTTC ATCGTC taatccgctc atctta	GCTAC GTTGTTCAGG	ATCTCATTAT	TACCTTCCTT	
Stokesia Vernonia Crepis	301 TTATACACGG TCGCCA TTATACACGC TCGCCA ttctacttcc ttgcca	AACTC TTACATTCCT	CTTCTTCCTC	CTCCTCTACC	
Stokesia Vernonia Crepis	351 TTACTTAGCA TGGCCC TTACTTAGCA TGGCCC ctacttagct tggccc	IGTTT ACTGGTTTTG	CCAATCTTCG	ATCCTCACTG	
Stokesia Vernonia Crepis	401 GTTTATGGGT CCTCGG GTTTATGGGT CATTGG gcttatggat cctcgg	GCCAT GAATGTGGCC	ATCATGCTTA	TAGTGAGTAC	
Stokesia Vernonia Crepis	451 CAGTGGATTG ATAACA CAGTGGGTTG ATAACA acatggtttg acgaca	ACCGT TGGATTCATC	CTCCATTCCT	TTCTTCTCAC	
Stokesia Vernonia	501 CCCTTACTTT TCTTGC ACCTTACTTT TCTTGC				

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Crepis	cccgtatttc	tcttggaaat	tcagtcaccg	gaatcaccat	tccaacacaa
Stokesia	551 ATTCACTCGA	AAACGAGGAA	GTTTACATTC	CTAGAACTCA	600 GTCCCAGCTC
Vernonia	ATTCACTCGA	AAACGAGGAG	GTTTACATTC	CTAAAGCCAA	GTCCCAGCTC
Crepis	gttcgattga	taacgatgaa	gtttacattc	cgaaaagcaa	gtccaaactc
Stokesia	601	CCACATACGA	እ ጥጥጥ ርጥጥር እ ር	አ አርአርርርርምር	650 CTCCAATCCT
Vernonia		CCAATTTCAA			
Crepis		atctataa			
	651				700
Stokesia Vernonia		ATCATGTTAA ATCATGTTGA			
Crepis		atcatgttca			
	701				750
Stokesia	ATGTTTCAGG	CAAGAAGTAC			TGATCCATTG
Vernonia		CAAGAAATAC			
Crepis	atatttccgg	caagaaatac	gacaggtttg	ccaaccactt	cgaccccatg
	751				800
Stokesia		TCACCGAGCG			
Vernonia Crepis		TCAGTGAGCG tcaaagaacg			
Olepis		ccaaagaacg	egageggeee	caggeceeee	
Stokesia	801	GCAGTGTTTT	ስርርርስ ር ጥርስስ	C	850
Vernonia		GCTGTGTTTT			
Crepis		gccgtgtttt			
	851				900
Stokesia		GGTGATGTGC	ATGTATGGAG	TTCCAGTGAT	
Vernonia		GGTAATGCGC			
Crepis	gagctgcttg	ggtagcgtgc	atgtatggag	ttccggtatt	aggcgtattt
	901				950
Stokesia		TCGTAATCAC			
Vernonia Crepis		TAATGATCAC atgtgatcac			
orebra	_	acycyattat	cittitigeat	cacacccatc	
Ctokosi -	951	mca a ccca a m	CC33C00CC350	CD D D CC D CC C	1000
Stokesia Vernonia		TCAACCGAAT TCGACCGAAT			
Crepis		tcaactgaat			
	1001				1050
Stokesia		TTTCGGTCTC	CTGAATCGGG	TTTTCCACGA	
Vernonia	TCGATAGAGA	TTTCGGTCTC	CTGAATAGGG	TGTTCCATGA	CGTCACTCAC
Crepis	tcgataggga	ctttggattc	ctgaatagtg	ttttccatga	tgttacacac
	1051				1100
Stokesia		TGCACCATTT			
Vernonia	ACACACGTGT	TGCATCATTT	GTTCCCGTAC	ATTCCACATT	ATCATGCAAA

Crepis	actcatgtca	tgcatcattt	gttttcatac	attccacact	atcatgcaaa
Stokesia Vernonia Crepis	GGAGGCGAGC	GAGGCCATCA GACGCAATAA gatgcaatca	AGCCGGTGTT	AGGGGAGTAT	CGGATGATCG
Stokesia Vernonia Crepis	ATAGGACTCC	ATTTTTCAAA GTTTTACAAA aattttaaaa	GCAATGTGGA	GAGAGGCGAA	GGAATGCATC
Stokesia Vernonia Crepis	TACATCGAGC	AAGATGCAGA CAGATGAAGA ctgat	TAAGAAGCAC	AAAGGTGTAT	ATTGGTACCA
Stokesia Vernonia Crepis	TAAAATGTGA	TCGATGATGG TACGAGCTGA tcatatgcaa	GTACGTAGTA	CGTTGTATGC	TTTTGTAACG
Stokesia Vernonia Crepis	TTTTGTAAGA	TGCTTGAATC TAAATAAATA tatgtataat	AATCTTGAAT	GAAGATAAAA	AAAAAAAAA
Stokesia Vernonia Crepis	AAAAAAAAA	TCTTTGAGTG AAAAAAA aaacagttaa	~~~~~~~	~~~~~~~	~~~~~~~
Stokesia Vernonia	1401 AATACGCTAA	АААААААА	ААААААААА	АААААААА	1450
Crepis	tgtggttgtc	tggttttgtt	gctatgaaag	aaagtatgtg	gttgtcggtc

Figure 3

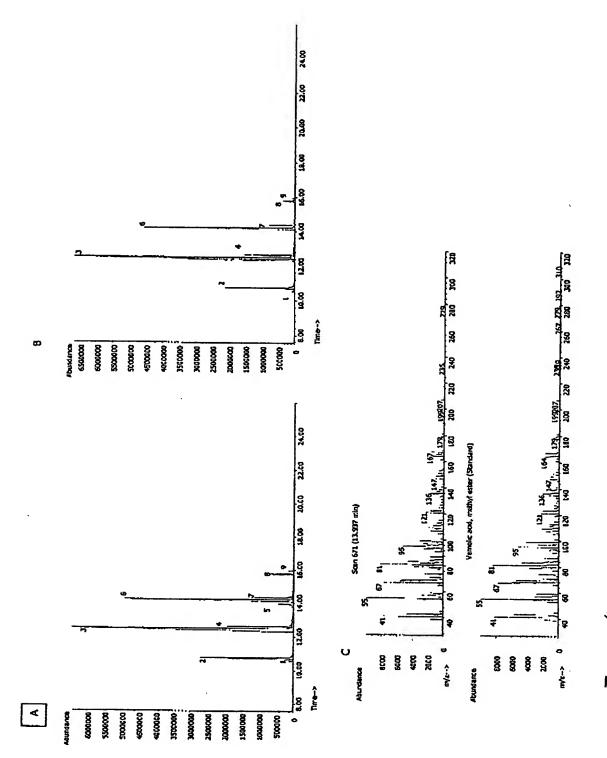


FIGURE 4

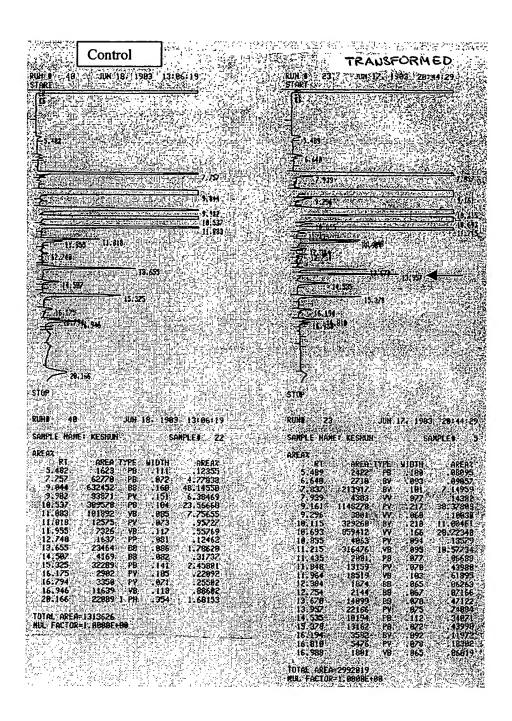


Figure 5